

# DES BALL AND THE BASES

Australia has its own research institute for strategic issues, the Strategic and Defence Studies Centre at the Australian National University in Canberra. Its head is Professor Des Ball, one of the world's foremost experts on military politics, nuclear strategy and weapons.

His interest in defence issues began when he was studying during the Vietnam years. Arrested in front of Parliament House carrying a placard saying "I shall not fight in Vietnam", his case was dismissed by Justice John Kerr (later Governor-General). This prolific author's books have received international acclaim.

In 1980 *A Suitable Piece of Real Estate: American Installations in Australia* was published. Dedicated "for a sovereign Australia", this book made information on the US installations public. For the first time the UK/USA Agreement on intelligence cooperation, the CIA and the US DSP (Defense Support Program) satellites, were linked together for Australians to see. Most information on public record about these installations had been gained in spite of the efforts of Australian authorities.

## 'Mature Partner'

While our authorities were excessively secretive about the bases, the Americans also have a history of withholding information. Ex-Prime Ministers Gorton, McMahon and Whitlam have all revealed that they were ignorant of aspects of base operations. Now, after the trial of Christopher Boyce, the memoirs of Victor Marchetti (former assistant to CIA Executive and Deputy Directors) and the 'Pine Gap Discrimination Case' (documented by P.L. Kealy, an Australian computer operator who worked at Pine Gap from 1970 to 1975), the Australian public and government are much better informed about the roles of US bases here.

The result has been a new approach to our involvement with the US and, to quote Des Ball, "that Australia can no longer be taken for granted. Any future Australian involvement with American defence, scientific and intelligence operations will be as a mature partner rather than merely as a suitable piece of real estate".

## New Revelations

Now there are two new books on the American installations from Des Ball. *A Base for Debate* deals with the US Satellite station at Nurrungar and *Pine Gap* with the most important US installation in Australia.

Nurrungar is a ground station for the DSP. These stations operate three Code 647/DSP early warning satellites - one over the Indian ocean controlled from Nurrungar, another over the Pacific and one above South America. They provide full coverage of all areas from which ICBMs (Inter-Continental Ballistic Missiles) or SLBMs (Sea-Launched Ballistic Missiles) could be launched against the US, giving them some 25-30 minutes and 10-20 minutes warning respectively. This system is at the heart of the US deterrent posture, which is to launch a retaliatory strike on warning of a Soviet missile attack.



## Peace Strategies

The two arguments used by the Australian government for the base at Nurrungar are:

- (1) It plays a critical role in supporting the 1970 Non-Proliferation Treaty and the 1963 Partial Test Ban Treaty, which have been instrumental in containing the spread of nuclear weapons.
- (2) The DSP system helps maintain global stability by making it impossible for the Soviet Union to conduct a ballistic missile launch without the US being immediately aware of it. Also, by being able to confirm any such launch the system significantly reduces the chance of accidental war (due to computer malfunction, for example).

## War Strategies

Against this has to be weighed the fact that the capabilities and operations of the DSP system can be used to support nuclear war-fighting strategies - the controlled use of nuclear weapons in a 'tit-for-tat' nuclear ex-

change. The infrared telescope on DSP satellites can detect the launch of a missile and the approximate location (within 3 nautical miles) of its launch site. This information is essential for planning a counter-strike.

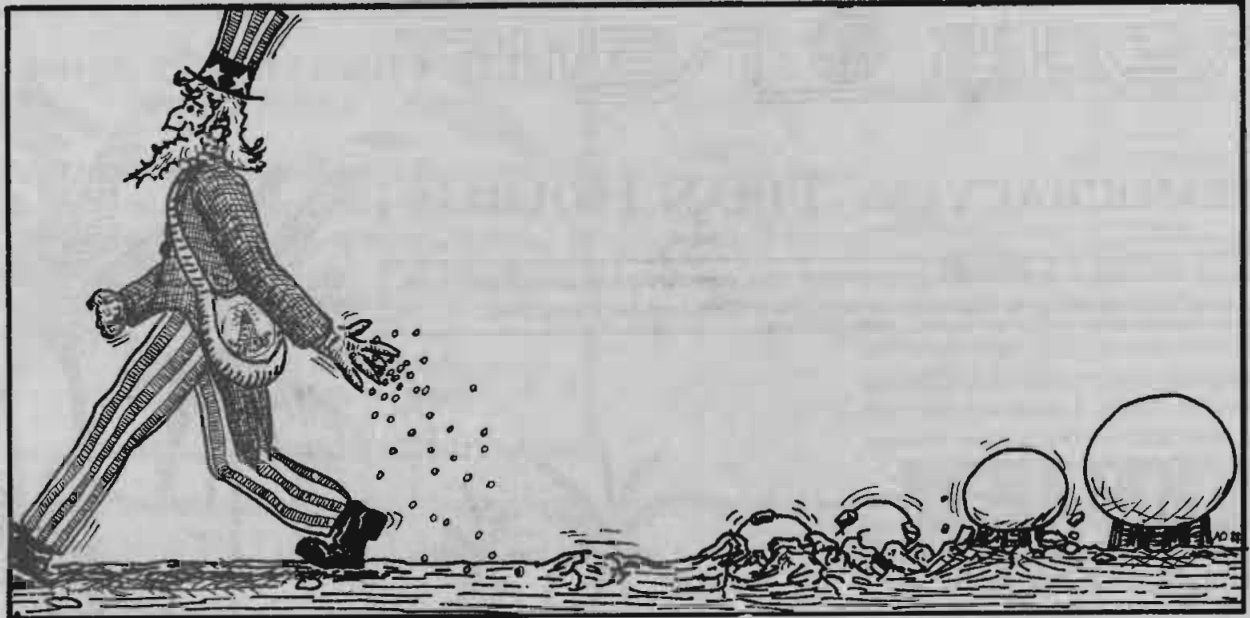
The nuclear detonation detection sensors aboard the satellites are designed with nuclear war-fighting in mind, rather than arms-control agreements. These provide real-time information on the location of nuclear detonations. There is also a potential role for the DSP systems in the Strategic Defence Initiative as the satellites undergo evolutionary development.

Significantly, technology is making it unnecessary to have a ground station in Australia. Truck-mounted DSP terminals have been developed; satellite-to-satellite laser links will improve communications between themselves and the ground.

Therefore the real argument is about the relative roles of the early-warning and war-fighting capabilities of the system. Des Ball's conclusion is "that an assessment of the strategic and technical considerations comes out against Australia's continual involvement in the DSP system".

## North West Cape

Of the three major US bases in Australia, the situation with North West Cape is the most clear-cut. The station has nothing at all to do with arms control - the main justification used for Nurrungar and Pine Gap. Further, Australia has no access to the messages which pass through it.



According to Ball, "the station is quite simply incompatible with Australian sovereignty... the station does not have to be located in Australia in order to perform its communications functions. The US should therefore be given notice that the North West Cape agreement will expire in 1988."

## Pine Gap

Des Ball finds the arguments for and against Pine Gap more finely balanced. It is an espionage base designed and operated to gather signals intelligence (SIGINT), primarily from the Soviet Union, but unavoidably from elsewhere. At issue is the capability of geostationary SIGINT satellites, their value to the arms control process and the "unique importance of a ground station in central Australia for efficient and secure control" of these satellites.

Pine gap was established as part of the *Rhyolite Program* run by the CIA's satellite coordinating agency, the National Reconnaissance Office. Since the original Rhyolite satellites, there have been second-generation (*Aquacode*) and third-generation (*Chalet*) spacecraft. In January 1985 a Magnum satellite - the largest geostationary satellite ever launched - was put into orbit by the space shuttle *Discovery*. This satellite probably had an antenna 100 metres in diameter, capable of picking up radios the size of a wristwatch. Pine Gap is the most important US SIGINT ground station.

There are four significant categories of signals monitored by these satellites. **Telemetry** is the electronic flow of data from a missile during its flight - engine, fuel, guidance system, etc. Although the Soviets now computer-

encrypt the signal, most of this data is still extremely valuable for verification of SALT agreements on offensive missiles.

**Radar intelligence** is linked to the Anti-Ballistic Missile (ABM) treaty. Since 1974 there have been four alleged Soviet violations of this treaty over size, mobility and location of their radars. Getting the data for verification of this arms control treaty also involves Pine Gap.

The other two categories are **Soviet satellite-to-ground communication**, which is largely encrypted - and **radio and telephone message traffic** from Soviet, Chinese, and Southeast Asian areas - among others. Although these satellites are not directed against Australian communications (confirmed by former Australian Pine Gap employees critical of management), there is always the chance of Australian transmissions being collected. So the real question is "What happens to the recordings of the Australian transmissions - are they destroyed, or passed back unread to the Australian intelligence and security agencies, or are they retained and those of interest read and analysed by the CIA and NSA?"

With eight radomes and a huge computer room (at least), Pine Gap is the fourth largest satellite ground station in the world. To relocate the station would cost over US\$2 billion. Each week there are two *Starlifter* flights through Alice Springs to collect the thousands of reels of SIGINT tape, so no-one can intercept transmissions back to the US.

Since the mid-1970s, when allegations of exclusion of Australians from the day-to-day management of the station were commonplace, new administrative arrangements have

been put in place. Des Ball considers that "there now seems no reason to disbelieve that the Australian Government is not fully apprised of all aspects of the US geostationary SIGINT satellite program, at least insofar as Pine Gap is involved, and that Australian officers do not fully participate in all the decision-making and day-to-day operations of Pine Gap."

## Controversial View

As the most respected Australian analyst, Ball's conclusions have to be taken very seriously. His arguments for the closure of North West Cape and Nurrungar will find wide agreement, but his view on Pine Gap will be more controversial.

Technological trends will make SIGINT satellites and Pine Gap more important - unlike Nurrungar - and deep cuts in strategic nuclear forces depends on reliable verification. This is currently only provided by the SIGINT program. Therefore, "it is simply not possible to seriously support arms control and disarmament and at the same time argue for the closure of the Pine Gap station."

Des Ball believes that radical cuts in the number of nuclear weapons are now possible. **Cuts of 90% are being studied on both sides.** For this sort of disarming to become reality, Pine gap is presently essential.

*A Base for Debate: The US Satellite Station at Nurrungar, and Pine Gap: Australia and the US Geostationary Signals Intelligence Satellite Program* are both published by Allen & Unwin Australia, at \$9.95 each.

- Gerard